DeMaria, Eva

From: DeMaria, Eva
Sent: Friday, August 28, 2015 3:20 PM
To: 'SUTTER Jennifer'
Cc: MCCLINCY Matt; Sheldrake, Sean; Michael Allen (allenmc@cdmsmith.com)
Subject: RE: COP stormwater topsoil import data

Hi Jennifer-

EPA has the following comments:

1. Sampling methods for material identified as COP stormwater topsoil considered for import are not described and not provided in the email summary. Therefore, it is not possible to determine if the single sample collected is representative of the material that could be imported, mixed, and placed at the site. Documentation of sampling should include information on the location, depth of sample collection, the volume being represented by the sample(s), and procedure used to collect and process the sample. Based upon the portions in the mix design, the COP stormwater topsoil would have an approximate volume of 2,550 cubic yards. Therefore, the sample methods and sample quantity should be representative of that volume.
2. The EPA agrees with the assessment that the COP stormwater topsoil does not pose a threat to re-contaminate the Portland Harbor based on concentrations not exceeding the PRGs, with the exception of one congener that had a reporting limit higher than the Portland Harbor PRG. 2,3,7,8 TCDD had a reporting limit of 0.228 ng/kg, which is higher than the PRG for RAO 9 of 0.1 ng/kg, and therefore it is inconclusive if this particular congener is below the PRG. The Portland Harbor PRG for sediment in RAO 1 of 10 ng TEQ/kg dw is not exceeded, based on Integral's calculated TEQ values.
3. Future testing of the silty fill and/or the end product as the approximate 3,000 cubic yards of topsoil/silty fill mix should be conducted on composite samples collected following the protocol in the Final Design Report. Analysis should be conducted by a laboratory that can achieve reporting limits that are below the soil import criteria and PRGs for all Portland Harbor constituents of concern.

Please call or email if you have questions. (b) (6) please contact Sean Sheldrake if you need an immediate response. Have a great weekend! Thanks.

Eva

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From: SUTTER Jennifer [mailto:SUTTER.Jennifer@deq.state.or.us]
Sent: Wednesday, August 26, 2015 4:33 PM
To: DeMaria, Eva
Cc: MCCLINCY Matt
Subject: FW: COP stormwater topsoil import data

Eva
I am discussion the proposal below with our toxicologists. Let me know if you have any concerns.
Thanks!

Jennifer Sutter
Project Manager, DEQ NWR Cleanup and Tanks

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From: Linda Baker [mailto:lbaker@integral-corp.com]
Sent: Wednesday, August 26, 2015 11:57 AM
To: SUTTER Jennifer
Cc: Drew Gilpin (Drew.Gilpin@evrazna.com); Debbie Deetz Silva (Debbie.Deetz.Silva@evrazna.com); Mike Byers (mike.byers@creteconsulting.com); Craig Heimbucher; Jamie Stevens (jamie.stevens@creteconsulting.com); Jane Sund
Subject: COP stormwater topsoil import data

Jennifer –

We can discuss further this afternoon - I was trying to get this information in front of you in advance of the meeting, but not sure you will have time to look at it…..

We tested the standard 3-way City of Portland stormwater topsoil (COP stormwater topsoil) and need DEQ's input on acceptability. All chemical criteria are met except dioxin/furan (D/F) and the detected concentrations are relatively low as discussed below (all data is attached).

The rub is that the grain size analysis shows that we will need to add some silty fill to this material to meet project specs. However, the supplier would not mix our project-specific topsoil without some assurance we would buy it. To make the project-specific topsoil, the supplier will mix 85% COP stormwater topsoil and 15% silty fill that he has available. We are proposing the following path forward:

- DEQ considers and ideally accepts the COP stormwater topsoil (results provided here)
- If DEQ accepts the COP stormwater topsoil, EVRAZ will analyze the silty fill that the supplier will mix with the approved topsoil for D/F (and ultimately the other analytes).
- The project-specific topsoil concentrations will be calculated from the two components using the 85:15 ratio. Silty fill concentrations and the calculated concentrations of the mixed project-specific soil will be provided to DEQ for consideration.

The COP stormwater topsoil comes from S&H Landscape Supplies. The topsoil gets used on the top/front of the berm and will be 1 to 2 foot thick for a total volume of 2,000-4,000 cy. The soil on the newly constructed berm will be covered by an erosion control blanket (coconut fiber jute mat) and planted.

Results of COP stormwater topsoil:
As summarized on the attached tables, the COP stormwater topsoil meets all goals in the design report with the exception of D/F. We request DEQ consider this material and believe it should be acceptable for topsoil use.

Five dioxin/furan congeners exceeded their import goal (based on the reporting limit) as follows:

	S+H-PortMix-Tual (composite/8.6) (pg/g; ng/kg)		**Import Criteria (pg/g; ng/kg)**	**mammalian TEF (unitless)**
	RESULT	RL		
1,2,3,4,6,7,8-Hepta CDD	**111**	0.263	2.5	0.01

1,2,3,4,6,7,8-Hepta CDF	**7.91**	0.115	2.5	0.01
1,2,3,6,7,8-Hexa CDD	**3.14**	0.147	2.5	0.1
Octa CDD	**1280**	0.296	5	0.0003
Octa CDF	**28.3**	0.113	5	0.0003

TEQs calculated with 3 treatments of NDs and 3 TEFs.

2.35	0.67	0.67	2.60	0.94	1.11	2.86	1.21	1.55	ng TEQ/kg dw
ND=0			ND=1/2RL			ND=RL			
mammalian 2005	fish	bird	mammalian 2005	fish	bird	mammalian 2005	fish	bird	

As the table shows, these concentrations/TEQs are below:

1. JSCS toxicity SLV for 2,3,7,8 TCDD = 9 ng/kg dw.
2. EPA draft FS RAO 1 PRG for human direct contact = 10 ng TEQ/kg dw.
3. Puget Sound DMMP open water disposal for non-dispersive sites = 4 ng TEQ/kg dw.
4. ODEQ Ecological toxicity SLVs and RBCs.

Some concentrations/TEQ exceed bioaccumulative based screening level values and draft PRGs. However, this material will be above the 100-year flood plain (not in the water) and as noted above, measures are being taken to prevent erosion.

Please let us know if these D/F concentrations are acceptable and we will move forward with analyzing the silty fill.

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